



TW 11/21/06

NOV 20 2006

**TRANSMITTAL OF APPEAL BRIEF (Large Entity)**

Docket No.  
0082.04

Application Of: **Morton Beroza**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/803,121	03/17/2004	David J. Parsley	24295	3643	

Invention: **Insect Attractant Releasing Device**

COMMISSIONER FOR PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:  
**September 19, 2006, November 19, 2006 falls on a Sunday**

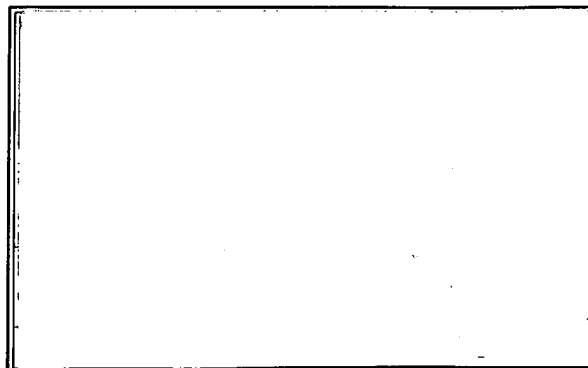
The fee for filing this Appeal Brief is: **\$500.00**

- ☐ A check in the amount of the fee is enclosed.
- ☒ The Director has already been authorized to charge fees in this application to a Deposit Account.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 50-2134. I have enclosed a duplicate copy of this sheet.
- ☐ Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

  
Signature

Dated: **November 20, 2006**



cc:



Patent Application

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of  
Morton Beroza

Docket No. 0082.04  
Serial No. 10/803,121

Art Unit: 3643  
Examiner: David J. Parsley

Filed: 03/17/2004

For: Insect Attractant Releasing Device

**APPEAL BRIEF**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

**1) REAL PARTY IN INTEREST**

The real party in interest is the United States of America  
as represented by the Secretary of Agriculture, Washington, D.C.

**2) RELATED APPEALS AND INTERFERENCES**

NONE

**3) STATUS OF THE CLAIMS**

Claims 1-5 were originally filed. Claims 1-10 were canceled  
by amendment and claims 6-11 were added. In the next response  
claims 6-11 were canceled and claims 12-17 were added. After the  
next Office action after a request for continued examination,  
claims 12-17 were canceled and new claims 18-23 were added. In

11/21/2006 WABDELK1 00000058 502134 10803121  
01 FC:1402 500.00 DA

the response after the second final rejection, claims 18, 23 and 23 were amended. A request for continued examination was filed.

After the next response, the claims remained unchanged. In the final response claims 18-23 remained unchanged.

Claims 18-23 are pending and are on appeal.

#### **4) STATUS OF AMENDMENTS**

No amendments were filed after receipt of the final rejection, only a request for reconsideration which was filed on September 20, 2006. A Notice of Appeal was filed concurrently with the request for reconsideration after final rejection.

#### **5) SUMMARY OF THE CLAIMED SUBJECT MATTER**

The present invention is a device for providing uniform emission of a flying insect attractant, a trap for flying insects containing the device and to a method for using both to trap flying insects.

Claim 18 is drawn to a device consisting of (a) a container 16 [0020, lines 1-9,][0025, lines 1-3] [0026, entire example 2][0027, entire paragraph] [0028, entire paragraph] (Figure 1, element 10) (Figure 5, 10) (Figure 8, element 10) (Figure 9, element 10) having a top surface, a bottom surface, and side

walls (**Figures 1,5,8, and 9**) having a composition of at least on volatile liquid attractant specific for one targeted flying insect species [0022, lines 1-16], [0023, lines 4-9], (**Figure 1, element 14; Figure 5, element 14; and Figure 9 element 14**) and a first opening in the top of said container to receive a wick [0020, line 5;lines 9-37], (**Figure 2, element 22; Figure, element 22; Figure 5, element 22**); (b) an adjustable wick [0020, line 5, lines 9-13][0021, whole paragraph]; (**Figures 1,5,8, and 9-element 12**) frictionally inserted into said first opening of said container wherein a portion of said wick area is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission providing maximum attraction for said flying insect [0021, entire paragraph][0027, entire paragraph], (**Figure 7**) [0028,entire paragraph], (**Table 1**); (c) a second opening in the top of said container, smaller than said first opening and large enough to prevent film closure by a liquid; wherein said second opening maintains air pressure in said container [0020, lines 11-37], (**Figure Figures 2 and 3, element 22**) and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant [0026, entire paragraph], (**Figure 6**).

Claim 19 depends from claim 18 and states that the composition further includes at least one volatile insecticide which is absorbed by the wick **[0010, entire paragraph]**.

Claim 20 depends from claim 18 and states that said first and second opening from a single opening with the first opening being of a size to frictionally hold a wick and said second opening is elongated and narrower than said first opening **[0020, lines 11-25], (Figure 2, element 22)**.

Claim 21 is drawn to a trap for flying insects comprising (a) an open ended trap that allows air passage through said trap **[0023, entire paragraph], [0028, entire paragraph], (paragraph 0030, entire paragraph]**; comprising a device consisting of a container **[0020, lines 1-9,][0025, lines 1-3] [0026, entire example 2][0027, entire paragraph] [0028, entire paragraph] (Figure 1, element 10) (Figure 5, 10) (Figure 8, element 10) (Figure 9, element 10)** having a top surface, a bottom surface, and side walls **(Figures 1,5,8, and 9)**, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species **[0022, lines 1-16], [0023, lines 4-9], (Figure 1,**

element 14; Figure 5, element 14; and Figure 9 element 14), and a first opening in the top of said container to frictionally receive a wick [0020, line 5; lines 9-37], (Figure 2, element 22; Figure, element 22; Figure 5, element 22); (b) an adjustable wick [0020, line 5, lines 9-13] [0021, whole paragraph]; (Figures 1, 5, 8, and 9-element 12) frictionally inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one attractant which results in maximum attraction of said flying insect over an extended period [0021, entire paragraph] [0027, entire paragraph], (Figure 7) [0028, entire paragraph], (Table 1), and (c) a second opening in the top of said container, smaller than said first opening and large enough to prevent film closure by a liquid, wherein said second opening maintains air pressure in said container [0020, lines 11-37], (Figure Figures 2 and 3, element 22) and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant [0026, entire paragraph], (Figure 6).

Claim 22 depends from claim 21 and states that the composition further includes at least one volatile insecticide wherein said at least one insecticide is absorbed by said wick **[0010, entire paragraph]**.

Claim 23 is drawn to a method for mass trapping of at least one targeted flying insect comprising: (a) placing in an open ended trap that allows air passage through said trap **[0023, entire paragraph]**, **[0028, entire paragraph]**, at least one device consisting of a container **[0020, lines 1-9,][0025, lines 1-3]** **[0026, entire example 2][0027, entire paragraph]** **[0028, entire paragraph]** (Figure 1, element 10)(Figure 5, 10)(Figure 8, element 10) (Figure 9, element 10), having a top surface and bottom surface and side walls **(Figures 1,5,8, and 9)**, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species **[0022, lines 1-16]**, **[0023, lines 4-9]**, **(Figure 1, element 14; Figure 5, element 14; and Figure 9 element 14)** and a first opening to frictionally receive a wick, a wick inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one

targeted flying insect species [0021, entire paragraph] [0027, entire paragraph], (Figure 7) [0028, entire paragraph], (Table 1);, and a second opening in the top of said container, smaller than said first opening and large enough to prevent film closure by a liquid where second opening maintains air pressure in container [0020, lines 11-37], (Figure Figures 2 and 3, element 22), and (b) adjusting said wick to provide a uniform emission rate of said at least one attractant for maximum attraction of said target insect over an extended period [0021, lines 7-18] and [0027, entire paragraph] (Figure7), [0028, entire paragraph and Table 1] and (c) hanging said at least one of said trap in a location suspected of being infested by at least one of a targeted flying pest flying insect [0028, entire paragraph] [0030, entire paragraph]; wherein said container emits attractant for at least about six months without replenishment of said attractant [0026, entire paragraph], (Figure 6)..



## **6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Whether claims 18 and 21 are unpatentable under 35 USC 103(a) over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Baker et al. (United States Patent No. 6,543,181).

2. Whether claims 18 and 21 are unpatentable under 35 USC 103(a) under 35 USC 103(a) over the combination of references to Grimes et al. (United States Patent No. 1,056,535) in view of Huang (United States Patent No. 6,585,990).

3. Whether claim 23 is unpatentable under 35 USC 103(a) over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Baker et al. (United States Patent No. 6,543,181).

4. Whether claim 23 is unpatentable under 35 USC 103(a) under 35 USC 103(a) over the combination of references to Grimes et al. (United States Patent No. 1,056,535) in view of Huang (United States Patent No. 6,585,990).

5. Whether claims 19 and 22 are unpatentable under 35 USC 103(a) over the combination of Grimes et al (United States Patent No. 1,056,535) as modified by Huang, as applied to claims 18 and 21.
6. Whether claims 18 and 21 are unpatentable under 35 USC 103(a) over the combination of Kubalek (United States Patent No. 2,254,948) in view of Baker et al. (United States Patent No. 6,543,181).
7. Whether claims 18 and 21 are unpatentable under 35 USC 103(a) over the combination of Kubalek (United States Patent No. 2,254,948) in view of Huang (United States Patent No. 6,585,990).
8. Whether claims 19 and 22 are unpatentable under 35 USC 103(a) over the combination of Kubalek (United States Patent No. 2,254,948) in view of Baker et al. (United States Patent No. 6,543,181).
9. Whether claims 19 and 22 are unpatentable under 35 USC 103(a) over the combination of Kubalek (United States Patent No. 2,254,948) in view of Huang (United States Patent No. 6,585,990).
10. Whether claim 23 is unpatentable under 35 USC 103(a) over the combination of Kubalek (United States Patent No.

2,254,948) in view of Baker et al. (United States Patent No. 6,543,181).

11. Whether claim 23 is unpatentable under 35 USC 103(a) over the combination of Kubalek (United States Patent No. 2,254,948) in view of Huang (United States Patent No. 6,585,990).

12. Whether claim 20 is unpatentable under 35 USC 103(a) over the combination of Grimes et al. (United States Patent No. 1,056,535) as modified by Baker et al. (United States Patent No. 6,543,181) further in view of Hurwitt (United States Patent No. 2,176,345).

13. Whether claim 20 is unpatentable under 35 USC 103(a) over the combination of Grimes et al. (United States Patent No. 1,056,535) as modified by Huang (United States Patent No. 6,585,990) further in view of Hurwitt (United States Patent No. 2,176,345).

## 7) ARGUMENTS

(A) Claims 18 and 21 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.

Claims 18 and 21 were finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Baker et al. (United States Patent No. 6,543,181). The invention of claims 18 is directed to a device for providing uniform emission of a flying insect attractant consisting of:

- (a) a container having a top surface, a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening of in the top of said container to receive a wick;
- (b) an adjustable wick frictionally inserted into said first opening of said container wherein a portion of said wick area is

exposed externally to an atmosphere and  
said exposed wick area can be increased or  
decreased over time to maintain a uniform  
rate of emission providing maximum  
attraction for said flying insect, and

- (c) a second opening in the top of said  
container, smaller than the first opening  
and large enough to prevent film closure  
by a liquid,

wherein said second opening maintains air pressure in said  
container and wherein said container emits said at least one  
volatile attractant for at least about six months without  
replenishment of said attractant.

The invention of claim 21 is directed to a trap for flying  
insects comprising:

- (a) an open ended trap that allows air passage through said  
trap comprising a device consisting of a container  
having a top surface, a bottom surface and side walls,  
having a composition of at least one volatile liquid  
attractant specific for one targeted flying insect  
species, and a first opening in the top of said

- container to frictionally receive a wick,
- (b) an adjustable wick frictionally inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one attractant which results in maximum attraction of said flying insect over an extended period, and
  - (c) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

Grimes et al is directed to a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any

suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

1. **NO WHERE** does Grimes et al. teach an adjustable wick.
2. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.

Baker et al. fails to cure the deficiencies of Grimes et al. since the patent fails to teach (1) an adjustable wick that is inserted into a container having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and (2) the use of a liquid volatile attractant specific for one targeted flying insect species wherein the liquid attractant in the container slowly travels up the wick to the outside of the device to be released into the atmosphere of the presently claimed invention and is emitted for at least about six months without replenishment. Although the patent teaches a volatile *Drosophila* fly attractant or attractant-trapant composition in the trap is provided as a free aqueous solution also serving as a trapant, or in a sustained release matrix, the patent fails to teach an adjustable wick frictionally inserted

into said first opening of said container wherein a portion of said wick is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission for at least six months without requiring replenishment providing maximum attraction for said flying insect. Baker et al. also teach that the dispenser releases the attractant for more than about 2 weeks and therefore maintains the ability of the device to attract flies for about 2 weeks(See column 14, lines 47-51). Baker et al. teaches the use of an attractant absorbed on a wick which is merely placed in the bottom of a cup with a lid sealed in position. The lid has a hole drilled in it which is the only aperture for the attractants to emanate through and for the insects to enter. With respect to claim 21, Baker et al. fails to teach an open-ended trap that includes the device of the claimed invention.

Below is a chart of the claim limitations of the present invention and what the prior art discloses:



Table 1.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish
Grimes	√		√			
Baker	√	√	√			

The combination of Grimes et al taken with Baker et al. would teach a device wherein the attractant would travel up a wick which is not exposed to the atmosphere as required by the instantly claimed invention, but would wet a pad made of a plurality of layers of fabric and solubilize a dry poison. There would be no control of the release rate of the attractant and the device would be operable for two weeks as taught by Baker et al. (See column 14, lines 47-51). Finally the combination of references fails to teach an open-ended trap which includes a device consisting of a container as claimed in claim 21. Although the Office states that Baker et al is only used to teach a volatile attractant and not to cure the deficiency of Grimes et al. relating to the adjustable wick, Appellants submit that the

combination of references are considered as a whole-what the combination teaches one of ordinary skill in the art.

There is simply no motivation to combine the references save for the teachings of the inventors' application to produce the instantly claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. One cannot use improper hindsight reconstruction to deprecate the claimed invention. Grimes et al. in view of Baker et al. fails to render the instantly claimed invention *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not merely arise by merely picking and choosing from the prior art to produce the claimed invention. In order to establish a *prima facie* case of obviousness it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte

Levengood, 28 USPQ2d 1300, 1301 (Bd. Pat. & Int'f, 1993).

Starting from this correct standard of obviousness, the error of the Office is clear-the rejection is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to combine the references in the manner set forth in the rejection. No where does the combination of references teach or suggest to one of ordinary skill in the art how to make the device of claim 18 or the trap of claim 21. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art how to modify Grimes et al. in view of Baker et al. to provide at least one liquid volatile insect attractant specific for attracting one targeted insect species in said container wherein the at least one volatile is emitted for at least about six months without replenishment of said attractant, an adjustable wick and an open ended trap that allows air passage through said trap comprising a device of the instantly claimed invention. Baker et al. fails to cure the deficiencies, therefore the rejection is improper.

**(B) Claims 18 and 21 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claims 18 and 21 were finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Huang (United States Patent No. 6,585,990). The invention of claims 18 is directed to a device for providing uniform emission of a flying insect attractant consisting of:

- (d) a container having a top surface, a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening of in the top of said container to receive a wick;
- (e) an adjustable wick frictionally inserted into said first opening of said container wherein a portion of said wick area is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform

- rate of emission providing maximum attraction for said flying insect, and
- (f) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

The invention of claim 21 is directed to a trap for flying insects comprising:

- (d) an open ended trap that allows air passage through said trap comprising a device consisting of a container having a top surface, a bottom surface and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening in the top of said container to frictionally receive a wick,
- (e) an adjustable wick frictionally inserted into said first opening of said container wherein the length of

said wick is frictionally adjustable to provide a uniform emission rate of said at least one attractant which results in maximum attraction of said flying insect over an extended period, and

- (f) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

Grimes et al is directed to a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

3. **NO WHERE** does Grimes et al. teach an adjustable wick.
4. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 2.

	Open-ended trap	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	Hangig trap
Grimes		√		√				
Huang		√	√	√				

The combination of Grimes et al. taken with Huang teaches substance such as a pheromone absorbed into the wick, it would be carried to a pad containing a dry poison via capillary action of the water going up the wick. The combination fails to teach one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the

atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. Furthermore, Huang teaches that the composition was at least as effective after 24 hours as the commercial standard it was compared to (See column 6, lines 33-56). Furthermore, Huang teaches coating an absorbent material with the attractant and toxicant, drying it and placing it in a container that has water. The water travels up the absorbent material which has a plastic coating on its lower half that sits in the water to prevent the attractant and toxicant from moving into the uncoated portion of the wick. The plastic coating also functions to keep the absorbent material erect (See columns 6-7 under Materials and methods). Finally, the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

There is simply no motivation to one of ordinary skill in the art to combine the references save for the teachings of the inventors' application to produce the instantly claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is



rendered obvious. One cannot use improper hindsight reconstruction to deprecate the claimed invention. Grimes et al. taken with Huang fails to render the instantly claimed invention ***prima facie*** obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not merely arise by merely picking and choosing from the prior art to produce the claimed invention. In order to establish a *prima facie* case of obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte* Levengood, 28 USPQ2d 130,1301 (Bd. Pat. Appeals & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-the rejection is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to combine the references in the manner set forth in the rejection. Nowhere does the combination of references teach or suggest to one of ordinary skill in the art how to produce the device and the trap of claims 18 and 21 of the above-referenced application to provide at least one liquid volatile insect attractant specific for attracting one insect in said

container, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claims 21. Furthermore the combination of Grimes et al. taken with Huang fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

Therefore the rejection is improper.

**(C) Claim 23 is patentable over the art of record. It is improper to reject the claim under 35 U.S.C. 103(a) when the combination of references fails to suggest the claimed invention.**

Claim 23 was finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Baker et al. (United States Patent No. 6,543,181).

The invention of claim 23 is directed to a method for mass trapping of at least one targeted flying insect comprising:

- (a) placing an open ended trap that allows air passage through said trap, at least one device consisting of a

container, having a top surface and a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and a first opening to frictionally receive a wick, a wick inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species, and a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid wherein said second opening maintains air pressure in said container, (b) adjusting said wick to provide a uniform emission rate of said at least one attractant for maximum attraction of said target insect over an extended period, and (c) hanging at least one of said trap in a location suspected of being infested by at least one of a targeted pest flying insect; wherein said container emits an attractant for at least about six months without replenishment of said attractant.

Although the final rejection states that the combination of Grimes et al. (United States patent No. 1,056,535) in view of Baker et al. (United States Patent No. 6,543,181). renders the instantly claimed invention *prima facie* obvious, the references in combination fail to teach the instantly claimed invention and fail to provide motivation to one of ordinary skill in the art to modify Grimes et al. by the teachings of Baker et al. to render the claimed invention *prima facie* obvious.

Grimes et al. is directed to a method for killing flies using a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

1. **NO WHERE** does Grimes et al. teach an adjustable wick.
2. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.

Baker et al. fails to cure the deficiencies of Grimes et al as a whole. The Baker et al. patent fails to teach a method of mass trapping of at least one targeted insect species having (1) an adjustable wick that is inserted into a container having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and (2) the use of a liquid volatile attractant specific for one targeted flying insect species wherein the liquid attractant in the container slowly travels up the wick to the outside of the device to be released into the atmosphere of the presently claimed invention and is emitted for at least about six months without replenishment. Although the patent teaches a volatile Drosophila fly attractant or attractant-trapant composition, in the trap, is provided as a free aqueous solution also serving as a trapant, or in a sustained release matrix, the patent fails to teach an adjustable wick frictionally inserted into said first opening of

said container wherein a portion of said wick is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission for at least six months without requiring replenishment providing maximum attraction for said flying insect. Baker et al. also teach that the dispenser release the attractant for more than about 2 weeks and therefore maintains the ability of the device to attract flies for about 2 weeks (See column 14, lines 47-51). Baker et al. teaches the use of an attractant absorbed on a wick which is merely placed in the bottom of a cup and a lid then sealed in position. The lid has a hole drilled in it which is the only aperture for the attractants to emanate through and for the insects to enter. With respect to claim 21, Baker et al. fails to teach an open-ended trap that includes the device of the claimed invention.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 3.

	Open-ended trap	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	Hangig trap
Grimes		√		√				
Baker		√	√	√				

The combination of Grimes et al taken with Baker et al. would teach a method for attracting and killing insects having device wherein the attractant would travel up a wick which is not exposed to the atmosphere as required by the instantly claimed invention, but would wet a pad made of a plurality of layers of fabric and solubilize a dry poison. There would be no control of the release rate of the attractant and the device would be operable for two weeks as taught by Baker et al. (See column 14, lines 47-51). Finally the combination of references fails to teach a method for mass trapping of at least one targeted flying insect using an open-ended trap which includes a device consisting of a container as claimed in claim 21. Although the Office states that Baker et al is only used to teach a volatile attractant and not to cure the deficiency of Grimes et al.

relating to the adjustable wick, Appellants submit that the combination of references are considered as a whole-what the combination teaches one of ordinary skill in the art.

There is simply no motivation to combine the references save for the teachings of the inventors' application to produce the instantly claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. One cannot use improper hindsight reconstruction to deprecate the claimed invention. Grimes et al. in view of Baker et al. fails to render the instantly claimed invention *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not merely arise by merely picking and choosing from the prior art to produce the claimed invention. In order to establish a *prima facie* case of obviousness it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the



proposed manner to arrive at the claimed invention. Ex parte Levengood, 28 USPQ2d 1300,1301 (Bd. Pat. & Int'f, 1993).

Starting from this correct standard of obviousness, the error of the Office is clear-the rejection is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to combine the references in the manner set forth in the rejection. No where does the combination of references teach or suggest to one of ordinary skill in the art how to practice a method for mass trapping of at least one targeted flying insect by placing an opening ended trap that allows air passage through said trap having at least one device as stated in claim 23. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art how to modify Grimes et al. in view of Baker et al. to provide a method for mass trapping at least one targeted flying insect species using at least one liquid volatile insect attractant specific for attracting one targeted insect species in said container wherein the at least one volatile is emitted for at least about six months without replenishment of said attractant, an adjustable wick and an open ended trap that allows air passage through said trap comprising a device of the instantly claimed method for mass trapping of at least one

targeted flying insect. Baker et al. fails to cure the deficiencies of Grimes et al. Therefore the rejection is improper.

**(D) Claim 23 is patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claim 23 was finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Huang (United States Patent No. 6,585,990).

The invention of claim 23 is directed to a method for mass trapping of at least one targeted flying insect comprising:

- (a) placing an open ended trap that allows air passage through said trap, at least one device consisting of a container, having a top surface and a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and a first opening to frictionally receive a wick, a wick inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a

uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species, and a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid wherein said second opening maintains air pressure in said container, (b) adjusting said wick to provide a uniform emission rate of said at least one attractant for maximum attraction of said target insect over an extended period, and (c) hanging at least one of said trap in a location suspected of being infested by at least one of a targeted pest flying insect; wherein said container emits an attractant for at least about six months without replenishment of said attractant.

Although the final rejection states that the combination of Grimes et al. (United States patent No. 1,056,535) in view of Huang (United States Patent No. 6,585,990). renders the instantly claimed invention *prima facie* obvious, the references in combination fail to teach the instantly

claimed invention and fail to provide motivation to one of ordinary skill in the art to modify Grimes et al. by the teachings of Huang to render the claimed invention *prima facie* obvious.

Grimes et al. is directed to a method for killing flies using a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

3. **NO WHERE** does Grimes et al. teach an adjustable wick.
4. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 4.

	Open-ended trap	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	Hangig trap
Grimes		√		√				
Huang		√	√	√				

The combination of Grimes et al taken with Huang would teach a method for attracting and killing insects having a device wherein the attractant would travel up a wick which is not exposed to the atmosphere as required by the instantly claimed invention, but would wet a pad made of a plurality of layers of fabric and solubilize a dry poison. There would be no control of the release rate of the attractant and the device would be operable for hours not days much less months. See Huang, column 3, lines 49-54, for example. Finally the combination of references fails to teach a method for mass trapping of at least one targeted flying insect using an open-ended trap which

includes a device consisting of a container as claimed in claim 23.

There is simply no motivation to combine the references save for the teachings of the inventors' application to produce the instantly claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. One cannot use improper hindsight reconstruction to deprecate the claimed invention. Grimes et al. in view of Huang fails to render the instantly claimed invention *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not merely arise by merely picking and choosing from the prior art to produce the claimed invention. In order to establish a *prima facie* case of obviousness it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte

Levengood, 28 USPQ2d 1300,1301 (Bd. Pat. & Int'f, 1993).

Starting from this correct standard of obviousness, the error of the Office is clear-the rejection is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to combine the references in the manner set forth in the rejection. No where does the combination of references teach or suggest to one of ordinary skill in the art how to practice a method for mass trapping of at least one targeted flying insect by placing an opening ended trap that allows air passage through said trap having at least one device as stated in claim 23. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art how to modify Grimes et al. in view of Huang to provide at least one liquid volatile insect attractant specific for attracting one targeted insect species in said container wherein the at least one volatile is emitted for at least about six months without replenishment of said attractant, an adjustable wick and an open ended trap that allows air passage through said trap comprising a device of the instantly claimed method for mass trapping of at least one targeted flying insect. Huang fails to cure the deficiencies of Grimes et al. Therefore the rejection is improper.

**(E) Claims 19 and 22 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claims 19 and 22 were finally rejected under 35 USC 103(a) as being unpatentable over the combination of Grimes et al (United States Patent No. 1,056,535) as modified by Huang (United States Patent No. 6,585,990) as applied to claims 18 and 21.

The invention of claim 19, which depends from claim 18 states the device of claim 18 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by the wick.

The invention of claim 22, which depends from claim 21 states the trap of claim 21 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by the wick.

Grimes et al is directed to a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any



suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

5. **NO WHERE** does Grimes et al. teach an adjustable wick.

6. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 5.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	A volatile insecticide
Grimes	√		√				√
Huang	√	√	√				√

The combination of Grimes et al. taken with Huang teaches substance such as a pheromone absorbed into the wick, it would be carried to a pad containing a dry poison via capillary action of the water going up the wick. The combination fails to teach one

of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. Furthermore, Huang teaches that the composition was at least as effective after 24 hours as the commercial standard it was compared to (See column 6, lines 33-56). Furthermore, Huang teaches coating an absorbent material with the attractant and toxicant, drying it and placing in a container that has water. The water travels up the absorbent material which has a plastic coating on its lower half that sits in the water to prevent the attractant and toxicant from moving into the uncoated portion of the wick. The plastic coating also functions to keep the absorbent material erect (See columns 6-7 under Materials and methods). Finally, the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claims 19 and 22.

There is simply no motivation to one of ordinary skill in the art to combine the references save for the teachings of the inventors' application to produce the instantly claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed

invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. One cannot use improper hindsight reconstruction to deprecate the claimed invention. Grimes et al. taken with Huang fails to render the instantly claimed invention ***prima facie*** obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not merely arise by merely picking and choosing from the prior art to produce the claimed invention. In order to establish a *prima facie* case of obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte* Levengood, 28 USPQ2d 130,1301 (Bd. Pat. Appeals & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-the rejection is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to combine the references in the manner set forth in the rejection. Nowhere does the combination of references teach or suggest to one of ordinary skill in the art how to produce the device and the trap of claims 18 and 21 of the above-

referenced application to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claims 19 and 22.

Furthermore the combination of Grimes et al. taken with Huang fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

Therefore the rejection is improper.

**(F) Claims 18 and 21 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claims 18 and 21 were finally rejected under 35 USC 103 (a) as being unpatentable over the combination of Kubalek (United States Patent No. 2,254,948) in view of Baker et al. (United States Patent No. 6,543,181).

The invention of claims 18 is directed to a device for providing uniform emission of a flying insect attractant consisting of:

(a) a container having a top surface, a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening of in the top of said container to receive a wick;

(b) an adjustable wick frictionally inserted into said first opening of said container wherein a portion of said wick area is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission providing maximum attraction for said flying insect, and

(c) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

The invention of claim 21 is directed to a trap for flying insects comprising:

- (a) an open ended trap that allows air passage through said trap comprising a device consisting of a container having a top surface, a bottom surface and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening in the top of said container to frictionally receive a wick,
- (b) an adjustable wick frictionally inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one attractant which results in maximum attraction of said flying insect over an extended period, and
- (c) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

Kubalek discloses the use of sugar or molasses as an insect attractant. These are not volatile attractants specific for one targeted insect species. The molecules of sugar or molasses do not go into a vapor state as do the attractants defined by the instantly claimed invention as discussed in the response filed January 3, 2006 and herein incorporated by reference in its entirety. **Furthermore Kubalek fails to teach a frictionally adjustable wick to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.** The device of Kubalek is for killing insects that come in direct contact with the wick. The attractant, sugar or molasses, remains in solution. The sugar or molasses encourage the insect to ingest enough of the liquid containing the toxicant to kill the insect. The wick is only exposed at the surface of the device in order for the flying insect to come in contact. There is no teaching in the patent that the wick is adjusted to provide a maximum uniform emission rate of at least one attractant which is a volatile attractant which results in maximum attraction of said flying insect over an extended period of at least about six months. The patent is totally silent as to this element of the instantly claimed invention. From the disclosure and figures, the wick is flush with the top of the device. The combination of

Kubalek taken with Baker would teach a device that includes a container adapted to contain a quantity liquid attractant specific for one targeted insect species and a wick whose function is to draw water upward to the top of the pedestal. The teachings of the combination of references would result in an invention wherein the attractant would travel up the wick which is flush with the top of the container and is not adjustable. There would be no control of the release rate of the attractant and the device would be operable for about two weeks as taught by Baker. Finally the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

1. **NO WHERE** does Kubalek teach a volatile liquid attractant specific for one targeted flying insect species,
2. **NO WHERE** does Kubalek teach an adjustable wick frictionally inserted into a first opening,
3. **NO WHERE** does Kublakek teach a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.
4. **NO WHERE** does Kubalek teach an open-ended trap that



allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:  
Table 6.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	An open ended Trap
Kubalek	√		√		√		
Baker	√	√	√				

The combination of Kubalek taken with Baker would teach a device that includes a container adapted to contain a quantity of liquid attractant specific for one targeted insect species. Within the container is a wick that extends down into the liquid and is flush with the top of the container. The teachings of the combination of the two references would include an attractant which would be carried to the top of the container where the wick lies flush via capillary action of the water in the container going up the wick. The combination fails to one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There

would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. The teachings of the combination of references would result in an invention wherein the attractant would travel up the wick which is flush with the top of the container and is not adjustable. There would be no control of the release rate of the attractant and the device would be operable for about two weeks as taught by Baker.

Finally the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

There would be no motivation to one of ordinary skill in the art to combine Kublek with Baker since the combination of teachings teach the use of static wicks, the references are totally silent on an adjustable wick as required by pending claims 18, and 21, and with respect to claim 21 , the combination fails to teach the trap of the instantly claimed invention. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte Levengood*, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Kubalek et al. to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claims 21-23. The Baker patent fails to cure the deficiencies of Kubalek et al. Furthermore the combination of Kubalek et al. taken with Baker et

al fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

**(G) Claims 18 and 21 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claims 18 and 21 were finally rejected under 35 USC 103 (a) as being unpatentable over the combination of Kubalek (United States Patent No. 2,254,948) in view of Huang (United States Patent No. 6,585,990).

The invention of claims 18 is directed to a device for providing uniform emission of a flying insect attractant consisting of:

(a) a container having a top surface, a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening of in the top of said container to receive a wick;

(b) an adjustable wick frictionally inserted into

said first opening of said container wherein a portion of said wick area is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission providing maximum attraction for said flying insect, and

(c) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

The invention of claim 21 is directed to a trap for flying insects comprising:

- (d) an open ended trap that allows air passage through said trap comprising a device consisting of a container having a top surface, a bottom surface and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening in the top of said container to frictionally receive a wick,
- (e) an adjustable wick frictionally inserted into said

first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one attractant which results in maximum attraction of said flying insect over an extended period, and

- (f) a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

Kubalek discloses the use of sugar or molasses as an insect attractant. These are not volatile attractants specific for one targeted insect species. The molecules of sugar or molasses do not go into a vapor state as do the attractants defined by the instantly claimed invention as discussed in the response filed January 3, 2006 and herein incorporated by reference in its entirety. **Furthermore Kubalek fails to teach a frictionally adjustable wick to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six**

**months without replenishing the liquid attractant.** The device

of Kubalek is for killing insects that come in direct contact with the wick. The attractant, sugar or molasses, remains in solution. The sugar or molasses encourage the insect to ingest enough of the liquid containing the toxicant to kill the insect.

The wick is only exposed at the surface of the device in order for the flying insect to come in contact. There is no teaching in the patent that the wick is adjusted to provide a maximum uniform emission rate of at least one attractant which is a volatile attractant which results in maximum attraction of said flying insect over an extended period of at least about six months. The patent is totally silent as to this element of the instantly claimed invention. From the disclosure and figures, the wick is flush with the top of the device.

5. **NO WHERE** does Kubalek teach a volatile liquid attractant specific for one targeted flying insect species,
6. **NO WHERE** does Kubalek teach an adjustable wick frictionally inserted into a first opening,
7. **NO WHERE** does Kublakek teach a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.
8. **NO WHERE** does Kubalek teach an open-ended trap that

allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in Claim 21.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 7.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	An open ended Trap
Kubalek	√		√		√		
Huang	√	√	√				

The combination of Kubalek in view of Huang teaches a device that includes a container but adapted to contain a quantity of liquid. Within the container is a wick that extends down into the liquid and is flush with the top of the container. The teachings of the combination of the two references would include a substance such as a pheromone absorbed onto the wick; it would be carried to the top of the container where the wick lies flush via capillary action of the water in the container going up the wick. The combination fails to one of ordinary skill in the art at the



time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. Huang teaches that the composition of the claimed invention was at least as effective after 24 hours as the commercial standard that it was compared to. The presently claimed invention, shows in Table 1, that the claimed invention is much more attractive than the commercial standard when the wick is adjusted to 2 inches exposed to the atmosphere even up to 10 weeks. Finally, the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

There would be no motivation to one of ordinary skill in the art to combine Kublek with Huang since the combination of teachings teach the use of static wicks, the references are totally silent on an adjustable wick as required by pending claims 18, and 21, and with respect to claim 21, the combination fails to teach the trap of the instantly claimed invention. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of

the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte Levengood*, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Kubalek et al. to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, an adjustable wick and an opened ended trap that allows air passage through said traip comprising a device of the instantly claimed invention described in claims 21-23. The Huang

patent fails to cure the deficiencies of Kubalek et al.

Furthermore the combination of Kubalek et al. taken with Huang fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

**(H) Claims 19 and 22 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claims 19 and 22 were finally rejected under 35 USC 103(a) as being unpatentable over the combination of Kubalek (United States Patent No. 2,254,948) in view of Baker et al. (United States Patent No. 6,543,181) as applied to claims 18 and 21.

The invention of claim 19, which depends from claim 18 states the device of claim 18 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by the wick.

The invention of claim 22, which depends from claim 21 states the trap of claim 21 wherein said composition further

includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by the wick.

Kubalek discloses the use of sugar or molasses as an insect attractant. These are not volatile attractants specific for one targeted insect species. The molecules of sugar or molasses do not go into a vapor state as do the attractants defined by the instantly claimed invention. **Furthermore, Kubalek fails to teach a frictionally adjustable wick to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.**

The device of Kubalek is for killing insects that come in direct contact with the wick. The attractant, sugar or molasses, remains in solution. The sugar or molasses encourage the insect to ingest enough of the liquid containing the toxicant to kill the insect. The wick is only exposed at the surface of the device in order for the flying insect to come in contact. There is no teaching in the patent that the wick is adjusted to provide a maximum uniform emission rate of at least one attractant which is a volatile attractant which results in maximum attraction of said flying insect over an extended period of at least about six months. Furthermore, the insecticide, lead arsenate is not volatile but must be ingested to be lethal to the insect. The patent is totally silent as to this element of the instantly

claimed invention. From the disclosure and figures, the wick is flush with the top of the device.

1. **NO WHERE** does Kubalek teach a volatile liquid attractant specific for one targeted flying insect species,
2. **NO WHERE** does Kubalek teach an adjustable wick frictionally inserted into a first opening,
3. **NO WHERE** does Kublakek teach a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.
4. **NO WHERE** does Kubalek teach a volatile insecticide, and
5. **NO WHERE** does Kubalek teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 8.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	An open ended Trap	Volatile insecticide
Kubalek	√		√		√			
Baker	√	√	√					

The combination of Kubalek taken with Baker would teach a device that includes a container adapted to contain a quantity of liquid attractant specific for one targeted insect species. Within the container is a wick that extends down into the liquid and is flush with the top of the container. The teachings of the combination of the two references would include an attractant which would be carried to the top of the container where the wick lies flush via capillary action of the water in the container going up the wick. The combination fails to one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. The teachings of the combination of references would result in an invention wherein the attractant and nonvolatile insecticide would travel up the wick which is flush with the top of the container and is

not adjustable. There would be no control of the release rate of the attractant and the device would be operable for about two weeks as taught by Baker. Finally the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 22.

There would be no motivation to one of ordinary skill in the art to combine Kublek with Baker since the combination of teachings teach the use of static wicks, no volatile insecticides, and the references are totally silent on an adjustable wick as required by pending claims 19 and 22, and with respect to claim 22, the combination fails to teach the trap of the instantly claimed invention. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to

establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte Levengood*, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Kubalek et al. to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, a volatile insecticide, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claims 21-23. The Baker patent fails to cure the deficiencies of Kubalek et al. Furthermore the combination of Kubalek et al. taken with Baker et al fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation



save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

**(I) Claims 19 and 22 are patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claims 19 and 22 were finally rejected under 35 USC 103(a) as being unpatentable over the combination of Kubalek (United States Patent No. 2,254,948) in view of of Huang (United States Patent No. 6,585,990) as applied to claims 18 and 21.

The invention of claim 19, which depends from claim 18 states the device of claim 18 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by the wick.

The invention of claim 22, which depends from claim 21 states the trap of claim 21 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by the wick.

Kubalek discloses the use of sugar or molasses as an insect attractant. These are not volatile attractants specific for one targeted insect species. The molecules of sugar or molasses do

not go into a vapor state as do the attractants defined by the instantly claimed invention. **Furthermore, Kubalek fails to teach a frictionally adjustable wick to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.**

The device of Kubalek is for killing insects that come in direct contact with the wick. The attractant, sugar or molasses, remains in solution. The sugar or molasses encourage the insect to ingest enough of the liquid containing the toxicant to kill the insect. The wick is only exposed at the surface of the device in order for the flying insect to come in contact. There is no teaching in the patent that the wick is adjusted to provide a maximum uniform emission rate of at least one attractant which is a volatile attractant which results in maximum attraction of said flying insect over an extended period of at least about six months. Furthermore, the insecticide, lead arsenate is not volatile but must be ingested to be lethal to the insect. The patent is totally silent as to this element of the instantly claimed invention. From the disclosure and figures, the wick is flush with the top of the device.

1. **NO WHERE** does Kubalek teach a volatile liquid attractant specific for one targeted flying insect species,

2. **NO WHERE** does Kubalek teach an adjustable wick frictionally inserted into a first opening,
3. **NO WHERE** does Kublakek teach a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.
4. **NO WHERE** does Kubalek teach a volatile insecticide, and
5. **NO WHERE** does Kubalek teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 9.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	An open ended Trap	Volatile insecticide
Kubalek	√		√		√			
Huang	√	√	√					

The combination of Kubalek in view of Huang teaches a device that includes a container but adapted to contain a quantity of

liquid. Within the container is a wick that extends down into the liquid and is flush with the top of the container. The teachings of the combination of the two references would include a substance such as a pheromone absorbed onto the wick; a non-volatile insecticide that must be contacted or ingested by the insect, both would be carried to the top of the container where the wick lies flush via capillary action of the water in the container going up the wick. The combination fails to one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks.

Huang teaches that the composition of the claimed invention was at least as effective after 24 hours as the commercial standard that it was compared to. The presently claimed invention, shows in Table 1, that the claimed invention is much more attractive than the commercial standard when the wick is adjusted to 2 inches exposed to the atmosphere even up to 10 weeks. Finally, the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 22.

There would be no motivation to one of ordinary skill in the art to combine Kublek with Huang since the combination of

teachings teach the use of static wicks, the references are totally silent on an adjustable wick as required by pending claims 19, and 22, and with respect to claim 22, the combination fails to teach the trap of the instantly claimed invention. Furthermore, both references teach non-volatile insecticides that must be contacted or ingested. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte Levengood*, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the

Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Kubalek et al. to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, a volatile insecticide, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claim 22. The Huang patent fails to cure the deficiencies of Kubalek et al. Furthermore the combination of Kubalek et al. taken with Huang fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

**(J) Claim 23 is patentable over the art of record. It is improper to reject the claim under 35 U.S.C. 103(a) when the combination of references fails to suggest the claimed invention.**

Claim 23 was finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Kubalek (United States Patent No. 2,254,948) in view of Baker et al. (United States Patent No. 6,543,181).

The invention of claim 23 is directed to a method for mass trapping of at least one targeted flying insect comprising:

(a) placing an open ended trap that allows air passage through said trap, at least one device consisting of a container, having a top surface and a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and a first opening to frictionally receive a wick, a wick inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species, and a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a

liquid wherein said second opening maintains air pressure in said container, (b) adjusting said wick to provide a uniform emission rate of said at least one attractant for maximum attraction of said target insect over an extended period, and (c) hanging at least one of said trap in a location suspected of being infested by at least one of a targeted pest flying insect; wherein said container emits an attractant for at least about six months without replenishment of said attractant. Although the final rejection states that the combination of Kubalek (United States Patent No. 2,254,948) in view of Baker et al. (United States Patent No. 6,543,181). renders the instantly claimed invention *prima facie* obvious, the references in combination fail to teach the instantly claimed invention and fail to provide motivation to one of ordinary skill in the art to modify Kubalek by the teachings of Baker et al. to render the claimed invention *prima facie* obvious.

Kubalek discloses a method for killing insects using sugar or molasses as an insect attractant. These are not volatile attractants specific for one targeted insect species. The molecules of sugar or molasses do not go into a vapor state as do the attractants defined by the instantly claimed invention **Furthermore, Kubalek fails to teach a frictionally adjustable wick to provide a uniform emission rate of said at least one**



**volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.** The method of Kubalek includes a device for killing insects that come in direct contact with the wick. The attractant, sugar or molasses, remains in solution. The sugar or molasses encourage the insect to ingest enough of the liquid containing the toxicant to kill the insect. The wick is only exposed at the surface of the device in order for the flying insect to come in contact. There is no teaching in the patent that the wick is adjusted to provide a maximum uniform emission rate of at least one attractant which is a volatile attractant which results in maximum attraction of said flying insect over an extended period of at least about six months. Furthermore, the insecticide, lead arsenate is not volatile but must be ingested to be lethal to the insect. The patent is totally silent as to this element of the instantly claimed invention. From the disclosure and figures, the wick is flush with the top of the device.

1. **NO WHERE** does Kubalek teach a volatile liquid attractant specific for one targeted flying insect species,
2. **NO WHERE** does Kubalek teach an adjustable wick frictionally inserted into a first opening,
3. **NO WHERE** does Kublakek teach a uniform emission rate of

said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.

4. **NO WHERE** does Kubalek teach a volatile insecticide, and

5. **NO WHERE** does Kubalek teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 21.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 10.

	Method for mass trapping of at least one targeted flying insect	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	An open ended Trap	Hanging said trap
Kubalek		√		√		√			
Baker	√	√	√	√					

The combination of Kubalek taken with Baker would teach a method of mass trapping that includes a device that includes a container adapted to contain a quantity of liquid attractant specific for one targeted insect species. Within the container is

a wick that extends down into the liquid and is flush with the top of the container. The teachings of the combination of the two references would include an attractant which would be carried to the top of the container where the wick lies flush via capillary action of the water in the container going up the wick. The combination fails to one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. The teachings of the combination of references would result in an invention wherein the attractant and nonvolatile insecticide would travel up the wick which is flush with the top of the container and is not adjustable. There would be no control of the release rate of the attractant and the device would be operable for about two weeks as taught by Baker. Finally the combination of references fails to teach an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container in a method for trapping a targeted flying insect species as claimed in claim 23.

There would be no motivation to one of ordinary skill in the art to combine Kublek with Baker since the combination of teachings teach a method of trapping that includes the use of static wicks, and the references are totally silent on an

adjustable wick as required by pending claims 19 and 22, and with respect to claim 22 , the combination fails to teach the trap of the instantly claimed invention. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte Levengood*, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled

artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Kubalek et al. to provide a method for mass trapping of at least one targeted flying insect that includes at least one liquid volatile insect attractant specific for attracting one insect in said container, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claim 23. The Baker patent fails to cure the deficiencies of Kubalek et al. Furthermore the combination of Kubalek et al. taken with Baker et al fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

**(K) Claim 23 is patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claim 23 was finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Kubalek

(United States Patent No. 2,254,948) in view of Huang (United States Patent No. 6,585,990).

The invention of claim 23 is directed to a method for mass trapping of at least one targeted flying insect comprising:

(a) placing an open ended trap that allows air passage through said trap, at least one device consisting of a container, having a top surface and a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and a first opening to frictionally receive a wick, a wick inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species, and a second opening in the top of said container, smaller than the first opening and large enough to prevent film closure by a liquid wherein said second opening maintains air pressure in said container, (b) adjusting said wick to provide a uniform emission rate of said at least one attractant for maximum attraction of said target insect over an extended period, and (c) hanging at least one of said trap in a location suspected of being infested by at least one of a targeted pest flying insect; wherein said

container emits an attractant for at least about six months without replenishment of said attractant. Although the final rejection states that the combination of Kubalek (United States Patent No. 2,254,948) in view of Huang (United States Patent No. 6,585,990). renders the instantly claimed invention *prima facie* obvious, the references in combination fail to teach the instantly claimed invention and fail to provide motivation to one of ordinary skill in the art to modify Kubalek by the teachings of Huang to render the claimed invention *prima facie* obvious.

Kubalek discloses a method for killing insects using sugar or molasses as an insect attractant. These are not volatile attractants specific for one targeted insect species. The molecules of sugar or molasses do not go into a vapor state as do the attractants defined by the instantly claimed invention

**Furthermore, Kubalek fails to teach a frictionally adjustable wick to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.** The method of Kubalek includes a device for killing insects that come in direct contact with the wick. The attractant, sugar or molasses, remains in solution. The sugar or molasses encourage the insect to ingest enough of the liquid containing the toxicant to kill

the insect. The wick is only exposed at the surface of the device in order for the flying insect to come in contact. There is no teaching in the patent that the wick is adjusted to provide a maximum uniform emission rate of at least one attractant which is a volatile attractant which results in maximum attraction of said flying insect over an extended period of at least about six months. Furthermore, the insecticide, lead arsenate is not volatile but must be ingested to be lethal to the insect. The patent is totally silent as to this element of the instantly claimed invention. From the disclosure and figures, the wick is flush with the top of the device.

**6. NO WHERE** does Kubalek teach a volatile liquid attractant specific for one targeted flying insect species,

**7. NO WHERE** does Kubalek teach an adjustable wick frictionally inserted into a first opening,

**8. NO WHERE** does Kublakek teach a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species over a period of six months without replenishing the liquid attractant.

**9. NO WHERE** does Kubalek teach a volatile insecticide, and

**10. NO WHERE** does Kubalek teach an open-ended trap that allows air passage through said trap wherein said trap



includes a device consisting of a container as claimed in claim 21.

Below is a chart of the claim limitations of the present invention and what the prior art disclosed:

Table 11.

	Method for mass trapping of at least one targeted insect species	Container	At least one volatile liquid attractant specific for one targeted flying insect species	First opening to receive a wick	An adjustable wick	Second opening	Volatile attractant emitted for at least about six months with out need to replenish	An open ended Trap	Hanging the rrap
Kubalek		√		√		√			
Huang		√	√	√					

The combination of Kubalek in view of Huang teaches a method for trapping insects that includes a device that includes a container with a wick that extends down into the liquid and is flush with the top of the container. The teachings of the combination of the two references would include a substance such as a pheromone absorbed onto the wick; it would be carried to the top of the container where the wick lies flush via capillary action of the water in the container going up the wick. The combination fails to one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of

the release rate of the attractant since the references fail to teach adjustable wicks. Huang teaches that the composition of the claimed invention was at least as effective after 24 hours as the commercial standard that it was compared to. The presently claimed invention, shows in Table 1, that the claimed invention is much more attractive than the commercial standard when the wick is adjusted to 2 inches exposed to the atmosphere even up to 10 weeks. Finally, the combination of references fails to teach a method for mass trapping of at least one targeted flying insect using an open-ended trap that allows air passage through said trap wherein said trap includes a device consisting of a container as claimed in claim 23.

There would be no motivation to one of ordinary skill in the art to combine Kublek with Huang since the combination of teachings teach a method of trapping insects using static wicks, the references are totally silent on an adjustable wick as required by pending claim 23 and fails to teach the trap of the instantly claimed invention. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte Levengood, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Kubalek et al. to provide a method for mass trapping of at least one targeted flying insect that includes a device containing at least one liquid volatile insect attractant specific for attracting one insect in said container, an adjustable wick and an opened ended trap that allows air passage through said trap comprising a device of the instantly claimed invention described in claim 23. The Huang patent fails to cure

the deficiencies of Kubalek et al. Furthermore the combination of Kubalek et al. taken with Huang fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

**(L) Claim 20 is patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claim 20 was finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view of Baker et al. (United States Patent No. 6,543,181) and further in view of Hurwitt (United States Patent No. 2,176,345). The invention of claim 20 is dependent on claim 18 wherein the device of claim 18 wherein said first and second opening form a single opening with the first opening being a size to frictionally hold a wick and said second opening is elongated and narrower than said first opening.

Grimes et al is directed to a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

7. **NO WHERE** does Grimes et al. teach an adjustable wick.

8. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.

Baker et al. fails to cure the deficiencies of Grimes et al. since the patent fails to teach (1) an adjustable wick that is inserted into a container having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and (2) the use of a liquid volatile attractant specific for one targeted flying insect species wherein the liquid attractant in the container slowly travels up

the wick to the outside of the device to be released into the atmosphere of the presently claimed invention and is emitted for at least about six months without replenishment. Although the patent teaches a volatile *Drosophila* fly attractant or attractant-trapant composition in the trap is provided as a free aqueous solution also serving as a trapant, or in a sustained release matrix, the patent fails to teach an adjustable wick frictionally inserted into said first opening of said container wherein a portion of said wick is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission for at least six months without requiring replenishment providing maximum attraction for said flying insect. Baker et al. also teach that the dispenser release the attractant for more than about 2 weeks and therefore maintains the ability of the device to attract flies for about 2 weeks (See column 14, lines 47-51).

Baker et al. teaches the use of an attractant absorbed on a wick which is merely placed in the bottom of a cup and a lid then sealed in position. The lid has a hole drilled in it which is the only aperture for the attractants to emanate through and for the insects to enter. With respect to claim 21, Baker et al. fails to teach an open-ended trap that includes the device of the

claimed invention.

Hurwitt discloses a device for exterminating ants, crawling insects, which has a wick saturated with a liquid insecticide . The top of said exterminator has a cap or cover that comprises a dome-shaped member which has a circumferential slot or opening located in the underneath portion of the dome (See Figure 1 element 19) through which ants may readily pass to reach the insecticide. Underneath the dome is a partition 20 with openings 21 which is filled with absorbent material (not the wick 17). Partition 220 also includes opening through which ants will have access to the liquid insecticide absorbed in the absorbent material.

Below is a chart of the claim limitations of the present invention and what the prior art discloses:

Table 12.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	A first and second opening which form a single opening with the first opening being of a size to frictionally hold a wick and second opening elongated and narrower than first opening (Key shaped)	An adjustable wick	Volatile attractant emitted for at least about six months with out need to replenish
Grimes	√				
Baker	√	√			
Hurwitt	√				

The teachings of the combination of references including Hurwitt would result in an invention wherein the attractant would travel up the wick which is not exposed to the atmosphere as required by the instantly claimed invention, and wet the pad made of a plurality of layers of fabric and solubilize the dry poison.

There would be a plate over the wick at the top section prior to the pad that has small openings 24 as described by Hurwitt, and an opening 22 as described by Hurwitt which would allow for the wick to have a greater surface area at the pad. Openings 22 and 24 would not be found in the top of the container according to the combination of references as required by claim 18 upon which claim 20 depends in the instant application nor would they form a



single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening. There would be no control of the release rate of the attractant and the device would be operable for about two weeks as taught by Baker.

There would be no motivation to one of ordinary skill in the art to combine Grimes with Baker further in view of Hurwitt since the combination of teachings teach the use of static wicks, the references are totally silent on an adjustable wick as required by claim 20 and the combination fails to teach a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the

Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte Levengood, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Grimes et al. to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, and an adjustable wick and a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening. The Baker and Hurwitt patents fail to cure the deficiencies of Grimes et al. Furthermore the combination of Grimes et al. taken with Baker et al further in view of Hurwitt fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's

application to produce the claimed invention.

The rejection is improper.

**(M) Claim 20 is patentable over the art of record. It is improper to reject the claim under 35 USC 103(a) when the combination of references fails to suggest the claimed invention.**

Claim 20 was finally rejected under 35 USC 103(a) as being unpatentable over the combination of references to Grimes et al. (United States patent No. 1,056,535) in view Huang (United States Patent No. 6,585,990) and further in view of Hurwitt (United States Patent No. 2,176,345). The invention of claim 20 is dependent on claim 18 wherein the device of claim 18 wherein said first and second opening form a single opening with the first opening being a size to frictionally hold a wick and said second opening is elongated and narrower than said first opening.

Grimes et al is directed to a fly killer that is a poison device that is a container which can be a tray or a cup that contains water. Within the tray is a pedestal and within the pedestal and tray is a tubular magazine which extends down toward the bottom of the tray and serves to support a capillary member or wick whose function is to draw water upward to a pad made of a plurality of layers of fabric which is adapted to contain any

suitable **dry** poison. Figure 2 is similar to Figure 1 with the cap or guard removed. Figure 2 is merely a drawing without elements 17 and 18 which cover the wick when the device is in use.

1. **NO WHERE** does Grimes et al. teach an adjustable wick.
2. **NO WHERE** does Grimes et al teach the use of any attractant, volatile or otherwise, specific for one targeted insect.
3. **NO WHERE** does Grimes teach a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening.

The combination of Grimes et al. taken with Huang teaches substance such as a pheromone absorbed into the wick, it would be carried to a pad containing a dry poison via capillary action of the water going up the wick. The combination fails to teach one of ordinary skill in the art at the time the claimed invention was made a device with an adjustable wick that is exposed to the atmosphere. There would be no control of the release rate of the attractant since the references fail to teach adjustable wicks. Furthermore, Huang teaches that the composition was at least as effective after 24 hours

as the commercial standard it was compared to (See column 6, lines 33-56). Furthermore, Huang teaches coating an absorbent material with the attractant and toxicant, drying it and placing in a container that has water. The water travels up the absorbent material which has a plastic coating on its lower half that sits in the water to prevent the attractant and toxicant from moving into the uncoated portion of the wick. The plastic coating also functions to keep the absorbant material erect (See columns 6-7 under Materials and methods). Finally, the combination of references fails to teach a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening.

Hurwitt discloses a device for exterminating ants, crawling insects, which has a wick saturated with a liquid insecticide . The top of said exterminator has a cap or cover that comprises a dome-shaped member which has a circumferential slot or opening located in the underneath portion of the dome (See Figure 1 element 19) through which ants may readily pass to reach the insecticide. Underneath the dome is a partition, 20 with openings 21 which is filled with absorbent material (not the wick 17). Partition 220 also includes opening through which ants will have

access to the liquid insecticide absorbed in the absorbent material.

Below is a chart of the claim limitations of the present invention and what the prior art discloses:

Table 13.

	Container	At least one volatile liquid attractant specific for one targeted flying insect species	A first and second opening which form a single opening with the first opening being of a size to frictionally hold a wick and second opening elongated and narrower than first opening (Key shaped)	An adjustable wick	Volatile attractant emitted for at least about six months with out need to replenish
Grimes	√				
Huang	√	√			
Hurwitt	√				

The teachings of the combination of references including Hurwitt would result in an invention wherein the attractant would travel up the wick which is not exposed to the atmosphere as required by the instantly claimed invention, and wet the pad made of a plurality of layers of fabric and solubilize the dry poison. There would be a plate over the wick at the top section prior to the pad that has small openings 24 as described by Hurwitt, and

an opening 22 as described by Hurwitt which would allow for the wick to have a greater surface area at the pad. Openings 22 and 24 would not be found in the top of the container according to the combination of references as required by claim 18 upon which claim 20 depends in the instant application nor would they form a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening. There would be no control of the release rate of the attractant and the device would be operable for about two weeks as taught by Baker.

There would be no motivation to one of ordinary skill in the art to combine Grimes with Huang further in view of Hurwitt since the combination of teachings teach the use of static wicks, the references are totally silent on an adjustable wick as required by claim 20 and the combination fails to teach a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening. There is simply no motivation save for the teachings of the inventor's application to produce the claimed invention. The Office is using the improper standard of **IMPROPER** hindsight analysis. It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered *prima facie* obvious.

The Office is also using the improper standard of obvious to try. It is respectfully submitted that the essence of obviousness does not arise by merely picking and choosing from the prior art to produce the claimed invention. "In order to establish *prima facie* obviousness, it is necessary for the Examiner to present evidence preferably in the form of some teaching, suggestion, incentive, or general available knowledge, that one of ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte Levengood, 28 USPQ2d, 1300 (Bd. Pat. & Int'f, 1993). Starting from this correct standard of obviousness, the error of the Office is clear-it is improper because the Office has failed to identify teachings in the prior art motivating the skilled artisan to produce the device of the presently claimed invention. No references or combination of references have been provided which would teach, suggest, or motivate one of ordinary skill in the art to modify Grimes et al. to provide at least one liquid volatile insect attractant specific for attracting one insect in said container, and an adjustable wick and a single opening where the first opening is of a size to frictionally hold a wick and the second opening is elongated and narrower than said first opening. The Huang and Hurwitt patents fail to cure the deficiencies of Grimes et al. Furthermore the combination of



Grimes et al. taken with Huang further in view of Hurwitt fails to teach a container which emits said at least one volatile attractant specific for one targeted insect species for at least about six months without replenishment of said attractant. There is simply no motivation save for the teachings of applicant's application to produce the claimed invention.

The rejection is improper.

#### **8) CONCLUSIONS**

In view of the fact that the combination of references fails to render the claimed invention obvious, Appellants respectfully request this Board to reverse the final rejection in due course.

Respectfully submitted,

\_\_\_\_\_  
Date

\_\_\_\_\_  
Gail Poulos, Patent Advisor  
Registration No. 36,327  
USDA-ARS-OTT  
5601 Sunnyside Avenue, Rm. 4-1184  
Beltsville, Maryland 20705-5131  
(Voice) 504-5302

CC:

M. Beroza

J. Fado

## **APPENDIX**

### **(9) CLAIMS ON APPEAL**

Claim 18. A device for providing uniform emission of a flying insect attractant consisting of:

- (a) a container having a top surface, a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first opening in the top of said container to receive a wick;
- (b) an adjustable wick frictionally inserted into said first opening of said container wherein a portion of said wick area is exposed externally to an atmosphere and said exposed wick area can be increased or decreased over time to maintain a uniform rate of emission providing maximum attraction for said flying insect, and
- (c) a second opening in the top of said container, smaller than said first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one

volatile attractant for at least about six months without replenishment of said attractant.

Claim 19. The device of claim 18 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by said wick.

Claim 20. The device of claim 18 wherein said first and second opening form a single opening with the first opening being of a size to frictionally hold a wick and said second opening is elongated and narrower than said first opening.

Claim 21. A trap for flying insects comprising:

- (a) an open ended trap that allows air passage through said trap comprising a device consisting of a container having a top surface, a bottom surface, and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species, and a first

opening in the top of said container to frictionally receive a wick;

- (b) an adjustable wick frictionally inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one attractant which results in maximum attraction of said flying insect over an extended period, and

- (c) a second opening in the top of said container, smaller than said first opening and large enough to prevent film closure by a liquid,

wherein said second opening maintains air pressure in said container and wherein said container emits said at least one volatile attractant for at least about six months without replenishment of said attractant.

Claim 22. The trap of claim 21 wherein said composition further includes at least one volatile insecticide wherein said at least one volatile insecticide is absorbed by said

wick.

Claim 23. A method for mass trapping of at least one targeted flying insect comprising:

- (a) placing in an open ended trap that allows air passage through said trap, at least one device consisting of a container, having a top surface and bottom surface and side walls, having a composition of at least one volatile liquid attractant specific for one targeted flying insect species and a first opening to frictionally receive a wick, a wick inserted into said first opening of said container wherein the length of said wick is frictionally adjustable to provide a uniform emission rate of said at least one volatile attractant which results in maximum attraction of said one targeted flying insect species, and a second opening in the top of said container, smaller than said first opening and large enough to prevent film closure by a liquid wherein said second opening maintains air pressure in said

container,

- (b) adjusting said wick to provide a uniform emission rate of said at least one attractant for maximum attraction of said target insect over an extended period, and
- (c) hanging at least one of said trap in a location suspected of being infested by at least one of a targeted pest flying insect;

wherein said container emits attractant for at least about six months without replenishment of said attractant.